IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

EXHIBIT A

Excerpts from

The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition

For Serial No.: 09/519,605 Applicant(s): SUN, Peter

IEEE 100 The Authoritative Dictionary of IEEE Standards Terms

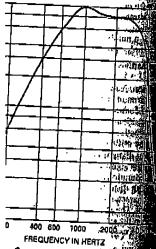
Seventh Edition



telephone infine

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tence factor (TIF) (1) (high-voltage s) A dimensionless quantity which apple ghting and is used to express the different a voltage or current wave shape from it ave on a voice-frequency communicate by electromagnetic or electrostatic indicaquencies and amplitudes of harmonic circuit, among other factors, determine ctive influence on a voice communities essed in terms of I · T product current is, kV · T product per kilovolt) is have a TIF of a voltage or current wave is the TIF of a voltage or current ways tof the sum of the squares (rss) of the squares of all the singly and the singly and the singly and the singly are the singly and the singly are the singly and the singly are the sing iare (rms) values of all the sine ways ig in ac waves both fundamental and times can-square value (unweighted) o age weighting is derived from listenlijest lative annoyance of speech impairment nal of frequency f as board through the elephone set. The result, called the hown in graphical and tubular formit page in forms of relative interfering



C-measage weighting

a voltage or current whysila ratio of the square rook of the lited root-mean-square (ring) ents (including in alternating d harmonics) to the rms (intervave. (The weightings are onts of different frequer

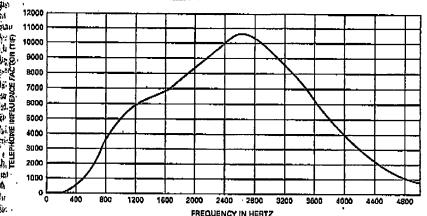
233 18 y electrical-noise test y electrical-noise test) The of all the sine-wave compo gs di urrent waves, both fundarito all Lines -mean-square value (univer P represents the relative life ents at the various harrion? a supply circuits. It is a difficulty of waveform and not of application the characteristics of this all represented by c-thessafet, at the coupling between the all the coupling between the coupling betwe elephone circuit is directly property juency. TIP is also shown

1157

telephone operator

1980 SINGLE FREQUENCY TIF VALUES										
TIF	FREQ	TIF	FAEQ	TIP	FAEC	TIF				
0.5	1020	6100	1860	7820	3000	9670				
90	1080	5400	1980	8330	3180	8740				
225	1140	5630	2100	8830	3800	8090				
400	1260	6050	2160	9080	8540	6730				
650	1380	6370	2220	9830	3560	6130				
1320	1440	6850	2340	9840	3900	4400				
	71F 0.6 90 225 400 650	TIF FREQ 0.6 1020 30 1080 225 1140 400 1260 650 1380	TIF PREQ TIF 0.5 1020 5100 30 1080 5400 225 1140 5630 400 1280 6050 650 1380 6370	TIF FREQ TIF FREQ 0.5 1020 5100 1860 30 1080 5400 1980 225 1140 5630 2100 400 1280 6050 2160 650 1380 6370 2220	TIF FREQ TIF FREQ TIF 0.6 1020 5100 1860 7820 30 1080 5400 1980 8330 225 1140 5630 2100 8830 400 1280 6000 2160 8080 650 1380 6370 2220 9830	TIF FREQ TIF FREQ TIF FREQ 0.5 1020 5100 1860 7820 3000 30 1080 5400 1980 8330 3180 225 1140 5630 2100 8830 3800 400 1280 6050 2160 8080 3540 650 1380 6370 2220 9330 3660				

1980 SINGLE FREQUENCY TIF VALUES											
FREQ	TIF	FREQ	TIF	FREQ	TIP	FREQ	TiF				
660	2260	1500	6680	2460	10240	4020	3700				
720	2760	1620	6970	2580 '	10600	4260	2750				
780	3360	1740	7320	2820	10210	4880	2190				
900	4350	1800	7570	2940	9820	5000	840				
1000	8000										



TIF weighting characteristic telephone influence factor

total effective or rms current (/) or voltage (kV) he single-frequency effective current (I) or voltage What frequency f, including the fundamental aingle-frequency TIP weighting at frequency f. TIP contribution of power-circuit voltage or front at frequency f may be expressed as follows:

TIP weighting characteristic represents the relative his from the weighting takes into account the relative attis. the c-message weighting) and the coupling bothe power and tolephone circuit, assumed to be directly filonal to frequency. It is defined as

A constant

he a-message weighting at frequency f c frequency under consideration.

0.TIF weighting characteristic is shown in the cor-

(COM/TA) 469-1988w power and distribution transformers) Of a voltage or mint wave in an electric supply circuit, the ratio of the poot of the sum of the squares of the weighted root-

entire wave. Note: This factor was formerly known as telephone interference factor, which term is still used occasionally when referring to values based on the original (1919) weighting curve. (PE/TR) C57.12.80-1978r

(5) For a voltage or current wave in an electric supply circuit, the ratio of the square root of the sum of the squares of the weighted root-mean-square values of all the sine-wave components (including alternating current waves both fundamental and harmonic) to the root-mean-square value (unweighted) of the entire wave. (IA/SPC) 519-1992

telephone line (data fransmission) A general term used in communication practice in several different senses, the more important of which are:

- The conductor or conductors and supporting or containing atructures extending between telephone stations and central offices or between central offices whether they be in the same or in different communities.
- The conductors and circuit apparatus associated with a particular communication channel.

telephone modal distance The distance between the center of the grid of a telephone handset transmitter and the center of the lips of a human talker (or the reference point of an artificial mouth) when the handset is in the modal position. See (COM/TA) 269-1971w. [50] also: telephone station.

telephone modal position The position a telephone handset assumes when the receiver of the handset is held in close contact with the car of a person with head dimensions that are model for a population. See also: telephone station. (COM) [50]

telephone network A telecommunication network primarily intended for telephony. (COM/TA) 823-1989w

telephone operator A person who handles switching and signaling operations needed to establish telephone connections

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